

REMARKS

INTRODUCTION

In accordance with the following, reconsideration of the allowability of the pending claims is respectfully requested.

Claims 1-44 are pending and under consideration.

IMPROPER ISSUANCE OF FINAL OFFICE ACTION

It is respectfully submitted that the Finality of the outstanding Office Action is improper.

The Examiner has issued a new rejection of at least claims 6-8 on page 7 of the outstanding Office Action, based upon a combination of Ohta, U.S. Patent No. 6,751,171, and Watanabe et al., U.S. Patent No. 6,493,304.

In the previous response, claims 6-8 were merely amended into independent form, without any amendment changing the scope or breadth of the same. Thus, the new rejection of claims 6-8 was not necessitated by amendment.

Withdrawal of the Finality of the outstanding Office Action is respectfully requested.

IMPROPER INTERPRETATION AND OBJECTION TO CLAIMS

Claims 5, 16, 28, 31-33, and 39-44 stand objected to because of the Examiner has indicated that the claimed "the reference value" in these claims should read "pre-set wobble amplitude" reference value.

However, it is respectfully submitted that the claimed "reference value" in claims 5, 16, 28, 31-33, and 39-44 clearly sets forth the same reference value feature with the proper antecedent formalities. For example, claim 5 recites "the reference value", with the only previously claimed reference value within its dependency chain being set forth as the "pre-set wobble amplitude reference value" of claim 1. Thus, the claimed "reference value" meets all requirements under 35 USC 112, second paragraph. Withdrawal of this objection is requested.

In addition, though claims 6, 7, and 8, for example, set forth particular different amplitude values, the Examiner has interpreted the remaining independent claims recitation of "pre-set wobble amplitude" as being the same as the claimed particular amplitude values of the example claims 6-8.

This interpretation of claims not including such specific amplitude value recitations as actually inherently having the same meaning is improper, as the claims are different in scope and breadth.

Such remaining independent claims not include these specific amplitude values and should not be limited to the same.

REJECTION RATIONALE

In the proposed modification of Ogihara, U.S. Patent No. 6,868,051, in view of Hwang, European Patent No. 1041553, the Office Action has stated that it would have been obvious to modify Ogihara to include a feature from Hwang, because "[t]he examiner concludes that whether one compares the signal of interest with each other to make a determination, or alternatively to compare with pre-stored values indicative of the set of media is merely an obvious selection between alternatives with no unexpected results occurring."

This same rationale was presented for the Office Action proposed modification of Watanabe et al.

However, applicants both submit that this rejection rationale is improper as being merely conclusory and also countered by the underlying invention focuses of each of Ogihara and Watanabe et al.

The recently issued KSR decision does not stand for a principle that a combination is obvious if only one factor supporting that obviousness is found or relied upon, when multiple non-obviousness factors also exist. There is a required balancing of factors. As noted further below, further detailed non-obviousness factors must be considered and weighed against any relied upon factors supporting obviousness. Again, example countering non-obvious factors will be discussed further below.

Regardless, the Office Action appears to have merely relied upon the claimed feature as being one alternative without unexpected results, i.e., predictable results, compared to the detailed features in each of the primary references.

However, any such reliance upon factors supporting obviousness must be evidenced in the record, regardless of whether the obviousness test is that of motivation, or a "combining prior art elements according to known methods to yield predictable results."

Here, the Office Action has only stated that a conclusion of predictable results, without any evidence of the same.

Regardless of the rejection rationale, as confirmed by KSR, the obviousness reason presented by the examiner must be more than a mere conclusion, i.e., a brief statement that a combination would yield predictable results is insufficient. Supported "evidence" for the same is same is still required.

As stated by the Supreme Court:

"Often it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of the demands known to the design community or present in the market place; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit."

The Supreme Court further reaffirmed *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006), which stated: "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

Thus, it is respectfully submitted that a single disclosure of elements by different references is insufficient evidence in the record to support a finding of obviousness.

KSR particularly emphasizes that more is required than merely the listing of features and a conclusion by the Examiner that the same combination would have been obvious to try or that predictable results would have resulted from the combination. There must be articulated reasoning and evidenced support.

Under KSR, to meet a prima facie obviousness case, such a "predictable results" rationale must still be supported by evidence in the record of such predictable results.

Secondly, and in addition, Graham requirements for a prima facie obviousness case require that there be a reasonable chance for success. A conclusion that a modification of first reference to include features from a second reference can only be maintained if it is supported by the KSR referenced evidence.

The Office Action has merely concluded that a missing feature of a first reference can be found in a second reference and its modification into the first reference would yield predictable results. There is no evidence of such predictable results in the record.

Thus, applicants respectfully submit that the outstanding rejection rationale is improper.

REJECTION UNDER 35 USC §103

Claims 1-5, 15, 16, 18, 27, 28, and 30 stand rejected under 35 USC §103(a) as being unpatentable over Ogihara, U.S. Patent No. 6,868,051, further considered with Hwang, European Patent No. 1041553. This rejection is respectfully traversed.

In addition to the above lack of evidence supporting the rejection rationale, applicants further respectfully submit that it would not have been obvious to modify Ogihara as suggested in the Office Action as this would fundamentally change Ogihara away from its inventive purpose and ultimately the invention of Ogihara.

As noted above, non-obviousness factors must also be considered, in addition to any obviousness factors already concluded by the Examiner.

Here, MPEP 2143.01 states:

"If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.

"If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious." Citing In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)(The court reversed the underlying rejection, holding the "suggested combination of references would require a substantial reconstruction and redesign of the elements shown in [the primary reference] as well as a change in the basic principle under which the [primary reference] construction was designed to operate")

In this regard, the primary focus and means for achieving those goals in Ogihara are the comparing of two differently filtered versions of the push-pull signal against each other. See Ogihara in col. 4, line 44, through col. 5, line 42. Also see Ogihara in col. 3, line 51, through col. 4, line 6.

Ogihara is focused on performing two different filter operations of the same push-pull signal and then comparing levels of the results of those two different filtered signals.

Ogihara does not compare the push-pull signal to a reference value. Such a comparison is also not necessary.

Rather, again, Ogihara achieves the desired disk type detection based upon the comparison of the two filtered versions of the push-pull signal, based upon a premise that different disk types have different frequency characteristics.

The Office Action has indicated that it would have been obvious to change/modify Ogihara to compare the push-pull signal or an RF signal against a reference value, since Hwang sets forth a reviewing of an RF peak-peak amplitude to determine whether a disk is a CD, DVD-ROM, or DVD-RAM.

Differently from Ogihara, Hwang is not based upon wobble detection but track pitch and recording marks effects on a same frequency light source, i.e., by using the same frequency source the different disk types can be determined by comparing the resultant RF peak-peak amplitude. The two disk detection schemes are for different purposes and based on different characteristics of the underlying disks.

Regardless, the Office Action has indicated that it would have been obvious to change Ogihara to detect this RF peak-peak amplitude to determine disk types.

However, such a change of Ogihara would appear to make the remainder of the disclosure and invention useless or unnecessary.

Thus, a change/modification of Ogihara such that the invention of Ogihara is no longer necessary or even needed would not have been obvious, and thus represents a primary factor supporting non-obviousness.

Accordingly, in addition to the lack of evidence in the record supporting the Office Action's conclusion of predictable results, it is respectfully submitted that the proposed modification of Ogihara would not have been obvious as it would have fundamentally changed the underlying operation thereof. Withdrawal of this rejection is respectfully requested.

Claims 6-8, 17, 19-21, 29, 31-33, and 39-44 stand rejected under 35 USC §103(a) as being unpatentable over Ogihara further considered with Hwang, and further in view of Morita, U.S. Patent No. 6,207,247.

Here, it is respectfully submitted that Morita fails to overcome the aforementioned non-obviousness reason for not combining Ogihara and Hwang.

Further, Morita merely describes an underlying structure of different disk types and does not disclose or suggest using such wobble amplitudes as mechanisms for detecting disk types.

Again, Ogihara is primarily focused on differently filtering a push-pull signal, and using a knowledge that different disk types have different frequency characteristics, proposes to

compare those different filtered signals to determine the type of disk based upon those different frequency characteristics.

Differently, Hwang is focused on comparing track and recording mark pitches affect on a same frequency optical light source, as shown by the amplitude of the resultant RF signal.

Thus, Ogihara is based upon a invention of detecting frequency characteristics between different disk types, and Hwang is based upon an invention of detecting RF amplitude affects caused by different track and recording mark pitches.

Neither Ogihara nor Hwang disclose or suggest that a wobble amplitude may be used for detecting a disk type, and Morita only sets forth that different disk types may have different wobble amplitudes.

Similar to above, any modification of either Ogihara or Hwang to now differently detect an amplitude of wobbles on the disks under review would change their respective mechanisms and not perform the preferred disk type detection thereof.

The proposed modification of either Ogihara or Hwang, or a combination of the same, would dismiss the already desired and preferred inventions thereof, making them unsatisfactory for their respective inventions.

Still further, with only Ogihara disclosing a mechanism of detecting the affects of wobbles on different disk types, such a proposed modification of either Ogihara or Hwang, or a combination of the same, would directly mean that a resultant combination would preferably involve the wobble affect detection scheme of Ogihara, and thus not detect the described amplitudes of Morita, but rather rely upon the inventive frequency characteristics of the wobbles.

Thus, the proposed combination of Ogihara, Hwang, and Morita would not result in the claimed wobble amplitude comparison.

Withdrawal of this rejection is respectfully requested.

Claims 1, 2, 15, and 27 stand rejected under 35 USC §103(a) as being unpatentable over Watanabe et al., U.S. Patent No. 6,493,304, further considered with Japanese Patent No. 2002-285582 (or 2000-285582) (JP '582). This rejection is respectfully traversed.

Here, it is noted that though the Office Action has stated that the rejection is based upon JP2002-285582, it is believed that this is a typographical error, and that the Examiner meant to rely upon JP2000-285582. Thus, the following traversal will be based on JP2000-285582.

The Office Action relies upon Watanabe et al., in col. 23, lines 47-61, as setting forth an amplitude detection capability for a wobble signal "wherein such detection can distinguish between various DVD discs."

Thereafter, the Office Action relies upon JP '582 set setting forth the same disclosure as the above Hwang, i.e., with Hwang being focused on comparing track and recording mark pitches affect on a same frequency optical light source, as shown by the amplitude of the resultant RF signal.

Thus, JP '582 is focused on comparing peak-peak amplitudes of an RF signal to detect different pitches between tracks and recording marks in CD and types of DVDs. As each disk type has a different track pitch and potential recording marks, their amplitudes will be different.

This detection of an RF amplitude in JP '582 is unrelated to wobble detection and JP '582 does not care about the same.

Rather, Watanabe et al. sets forth the knowledge of wobbles existing in the RAM disc, and not the ROM disc, as helpful in determining whether an input disk is a RAM or ROM disc.

Here, the existence of a wobble in a RAM disk will result in a different signal than a signal representing the non-existence of a wobble in a ROM disk.

Accordingly, this portion of Watanabe et al. is not concerned with the actual amplitude of a wobble, but rather that it exists at all. Further, with such a comparison of amplitudes by Watanabe et al., there is no need to compare the detected amplitude with a preset wobble amplitude, as Watanabe et al. is only concerned in whether a detected amplitude represents the existence of wobble, not their particular wobble amplitudes.

Therefore, in Watanabe et al. there is no need or desire to detect the amplitude of a wobble and compare that to a pre-set wobble amplitude reference value.

In addition, the problem overcome by the invention of JP '582 would appear to already be solved by Watanabe et al.

In particular, the remaining disclosure of Watanabe et al. discusses multiple ways to detect a disk types. The relied upon portion of Watanabe et al. also clearly indicates that the more detailed distinction between a RAM and ROM is also already accomplished.

Thus, Watanabe et al. does not need or desire the different technique of JP '582. And the solution proposed by Watanabe et al. would appear simpler than the system of JP '582.

As noted above, the Office Action has also stated that regardless of Watanabe et al. already solving such a problem, it would have been obvious to change Watanabe et al. to perform the method of JP '582, since they are merely different alternatives with unexpected results. However, as noted above, the Office Action has not provided any evidence that the results of using the system of JP '582 in Watanabe et al. would yield predictable results.

Rather, as noted above, the disclosure of Watanabe et al. supports the conclusion of Watanabe et al. not needing or desiring such a change.

Accordingly, it is respectfully submitted that it would not have been obvious to modify Watanabe et al. as proposed in the Office Action. Withdrawal of this rejection is respectfully requested.

Claims 5, 16, and 28 stand rejected under 35 USC §103(a) as being unpatentable over Watanabe et al., further considered with JP '582, and further in view of Ogihara. This rejection is respectfully traversed.

It is respectfully submitted that Ogihara fails to disclose or suggest the aforementioned deficient features, or support a combination of Watanabe et al. and JP '582 to read on the independent claims. Thus, withdrawal of this rejection is respectfully requested.

Claims 3, 4, 17, 18, 29, and 31-44 stand rejected under 35 USC §103(a) as being unpatentable over Watanabe et al., further considered with JP '582, and further in view of Ohta, U.S. Patent No. 6,751,171. This rejection is respectfully traversed.

The Office Action has relied upon Ohta to set forth a teaching to measure a peak-peak value of a wobble signal.

However, the Office Action has failed to describe how such a measuring of a peak-peak value of a wobble signal would be used or even desired by such a proposed combination of Watanabe et al. and JP '582.

In Ohta, the detection of a wobble amplitude is merely for first determining if gain control is represented by a wobble, and then a determination of a gain for the generated optical signal. See Ohta in col. 5, lines 45-67.

Ohta first removes an affect of a wobble from a push-pull signal for tracking (Ohta in col. 5, lines 7-19), and may use the pre-filtered push-pull signal for detecting the wobble to

determine that the disk is a CD-R disk for gain control. If such wobble are found to exist, then gain control is performed.

Thus, regarding disk type detection, Ohta does not disclose or suggest using a wobble amplitude for detecting the disk type. Ohta further does not disclose or suggest a pre-set wobble reference value.

Rather, Ohta only describes using any detected wobble signal for gain control or for merely identifying the need of gain control by the detection of the mere existence of wobble signals.

In this regard, Ohta would appear to merely implement the same operation as described in Watanabe et al, col. 23, lines 47-61, of merely needing to detect for the existence of wobbles and not care the what the amplitude of the wobble is for determining the disk type.

Again, there is no suggestion or disclosure in Ohta that the detection of different wobble amplitudes could be used for disk type detection. Likewise, Watanabe et al also fails to provide any suggestion or disclosure that the detection of different wobble amplitudes could be used in disk type detection.

Here, further, in Ohta, any wobble amplitude detection is performed after the disk type is determined.

Lastly, there is no suggestion or disclosure in Ohta regarding the specifically claimed reference values of claims 31-33 or 39-44. Ohta may describe available wobble amplitudes, but fails to disclose or suggest that such different amplitudes could be used for disk type detection.

Thus, a proposed modification of Watanabe et al and JP '582 in view of Ohta would not disclose the claimed features of claims 3, 4, 17, 18, 29, and 31-44.

Claims 6-8 stand rejected under 35 USC §103(a) as being unpatentable over Ohta further considered with Watanabe et al. These rejections are respectfully traversed.

As noted above, Ohta only sets forth detecting the amplitude of a wobble signal for gain control, and only needs to detect for the presence of wobbles for any disk type determination, merely in a similar manner as Watanabe et al.

Neither reference discloses or suggests that an amplitude of a wobble be detected and that detected amplitude be used for disk type detection.

Further, Ohta may describe available wobble amplitudes, but fails to disclose or suggest that such different amplitudes could be used for disk type detection.

The fact that there may be different wobble amplitudes does not mean that either of Ohta or Watanabe et al. would use the same for disk type detection. Both references do not care about the wobble amplitude for disk type detection.

Withdrawal of these rejections and allowance of all pending claims is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

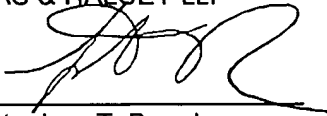
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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